Abstract of the Disclosure

Disclosed is a semi-transmission type liquid crystal display device capable of ensuring a large viewing-angle, improved productivity, suppressed power consumption and increased yield by optimizing the design of its optical elements. The display comprises: a lower substrate having a reflection electrode and a lower orientation film; an upper substrate having a color filter and an upper orientation film; a liquid crystal layer interposed between the upper and lower substrates; upper and lower phase films positioned on the outer surfaces of the upper and lower substrates, respectively, for transforming linearly polarized light into circularly polarized light; and upper and lower polarization plates provided on the upper and lower phase films, respectively, for transforming natural light from outside into linearly polarized light. The device has a reflection-type liquid crystal display area in which: the liquid crystal layer has a phase delay value $d\Delta n$ of 0.24-0.27 μm; the upper phase film has a function of $\lambda/4$ phase compensation and an optical axis of 140° to 146°; the upper orientation film has an orientation angle of 40° to 50° relative to a horizontal line; the lower orientation film has an orientation angle of

-10° to -20° relative to a horizontal line; and the upper polarization plate has a transmission axis angle of 104° to 122.5° and a transmission-type liquid crystal display area, positioned between the upper and lower substrates having no reflection electrode, in which: the liquid crystal layer has a phase delay value $d\Delta n$ of 0.24-0.40 μm; the lower phase film has a function of $\lambda/4$ phase compensation and an optical axis of 50° to 64°; and the lower polarization plate has a transmission axis angle of 100° to 110°.